

REMARKS

The Office Action of April 5, 2007 has been received and its contents carefully considered.

It is noted that a Request for Continued Examination (RCE) and an Information Disclosure Statement are being filed concurrently.

The Present Amendment revises claim 1 (the only independent claim in this application) to specify that the vehicle controller “receives detection signals carrying information about vehicle operation and operating signals from the operator, the vehicle controller generating control signals for controlling the vehicle.” This is supported by the paragraph at page 2 of the application, lines 7-18, and by the passage at page 7, lines 17-19. The present Amendment also revises claim 1 to specify that the “predetermined data storage” stores predetermined data that has been “selected from data appearing in the vehicle controller.” This is supported by the passage at page 2, lines 19-23.

In addition, the present Amendment adds new claims 12-15. They specify examples of the “detection signals” and “operation signals” that are now recited in claim 1. The new claims are supported by the previously-mentioned paragraph at page 2, lines 7-18.

Section 4 of the Office Action rejects independent claim 1 (along with various dependent claims) for anticipation by US patent 4,939,652 to Steiner. However, it is respectfully submitted that the invention now defined by claim 1 is neither anticipated by the reference nor rendered obvious by the reference.

Claim 1 recites a “vehicle controller,” and the Office Action identifies this as Steiner’s VMU (which stands for “vehicle mounted unit”) 104. Claim 1 has been amended, though, to

provide that the vehicle controller receives detection signal and also operating signals from the operator, and generates control signals for controlling the vehicle.

Steiner's Figure 1 shows that his VMU 104 receives input signals from transducers 102 and discrete devices 103, but there are no control signals for controlling the vehicle. A complete diagram shown in Steiner's Figure 6 shows various sensor and switch inputs (see the paragraph at column 6, lines 38-50), but (again) there is no suggestion that Steiner's VMU generates control signals for controlling the vehicle (the communication port 120 shown in Steiner's Figure 6 is used merely to transfer data to a computer 111 – see Steiner's Figure 1). Indeed, there appears to be no suggestion in the Steiner reference that his VMU 104 even receives operating signals from the operator of the vehicle, in accordance with claim 1.

Claim 1 also recites "a predetermined data storage for storing predetermined data selected from data appearing in the vehicle controller." The Office Action draws attention to a passage at Steiner's column 3, lines 12-20 ("The VMU processes the input data for immediate or subsequent display and records data in its internal memory for computer 111 report generation. At the end of the trip, or whenever the customer so desires, data are transferred from the VMU to the computer using transfer means 105."). The problem with such an interpretation of the reference is that Steiner's VMU includes its internal memory, so if Steiner's VMU is equated with the "vehicle controller" of claim 1 then the internal memory is "used up" with the "vehicle controller" recitation of claim 1. That is, Steiner's internal memory cannot be counted twice, once as part of his VMU and again as part of the "predetermined data storage" of claim 1.

In addition, claim 1 provides that the "predetermined data storage" stores data "selected from data appearing in the vehicle controller." Since Steiner's VMU 104 is not the "vehicle

controller" of claim 1, as discussed above, Steiner's arrangement clearly cannot store data selected from data appearing in the vehicle controller, in accordance with claim 1.

Claim 1 also recites "a removable memory," and "a data collection controller that receives the predetermined data from the predetermined data storage, the data collection controller including at least a code entry section for entering desired data in code, and a download section for downloading data entered in code and data in the predetermined data storage into the removable memory." For these features, the Office Action relies on Steiner's Figure 10, and the passage at column 10, lines 36-55. The Office Action takes the position that the DTU (which stands for "data transferring unit") shown in Figure 10 serves as both the "removable memory" and the "data collection controller" of claim 1.

It is respectfully submitted that Steiner's DTU does not even fulfill the "removable memory" recitation of claim 1, since the claim provides that data from the "predetermined data storage" is downloaded into the removable memory and (as discussed above) Steiner lacks the "predetermined data storage." Steiner's DTU can certainly not meet the "data collection controller" limitation of claim 1. According to claim 1, the "data collection controller" receives the predetermined data from the predetermined data storage, and downloads data entered in code and data in the predetermined data storage. It bears repeating that Steiner's arrangement lacks the predetermined data storage of claim 1, so Steiner's DTU clearly does not receive data from the predetermined data storage and download it into a removable memory.

Furthermore, the passage in Steiner that is noted in the Office Action says that the data entry means 13 of the DTU is used to set operating modes. It is not "a code entry section for entering desired data in code" that is later downloaded to a removable memory, in accordance with claim 1.

So Steiner clearly does not anticipate the invention defined by claim 1. In view of the many differences between Steiner's arrangement and claim 1, it is also respectfully submitted that Steiner would not have provided an incentive for an ordinarily skilled person to achieve the invention defined by claim 1.

The remaining claims depend from claim 1 and recite additional limitations to further define the invention, so they are automatically patentable along with claim 1. Nevertheless, several dependent claims will now be briefly addressed.

Claim 3 provides that a frequency-accumulation-type data recording method is used, "in which every time a data value detected at predetermined intervals falls within a predetermined range of data values, a detection count for the range is accumulated and recorded." Referring to the passage at Steiner's column 4, lines 20-55, the Office Action takes a position that claim 3 is anticipated by the reference. Applicants respectfully disagree. Nothing in this passage indicates that "a detection count" is recorded. Instead, the passage indicates that the data that are recorded by Steiner are data representative of the total activity during the time interval. In the case of recording vehicle speed, one could choose "average speed" as the data representative of a total activity. The time interval can be lengthened to reduce the memory space required, the reference advises, but resolution would be better with a shorter interval. Such disclosure is clearly different from what is recited in claim 3, and would not have led an ordinarily skilled person to what is recited in claim 3.

Claims 4 and 6 provide that "a plurality of data is entered in code," and claim 5 provides that this data "is at least two of driver data, service route data, sender data, goods data, loading ratio data, and data for driving time periods." At the top of page 4, the Office Action takes the position that these features are disclosed in Steiner's Figure 10 and the passage at column 5, lines

48-54. However, this passage only discloses that the data entry means 13 of Steiner's DTU is used to enter an operating mode. There is no disclosure in the reference of entering data rather than setting the desired operating mode. There is certainly no suggestion of entering driver data, service route data, or so on in accordance with claim 5.

Section 4 of the Office Action rejects claims 5, 8, 9, and 10 for obviousness based on Steiner in view of US patent 5,550,738 to Bailey et al (which will hereafter be called simply "Bailey"). The Office Action states that "Steiner discloses that the data collection controller includes a data entry means which may be used to display/edit VMU program and control parameters (column 10, line 52)." However, the mode mentioned at line 52 Steiner's column 10 is "Display/Edit VMU program control parameter," without the word "and" between "program" and "control parameters." What the reference discloses is that a data entry means 13 of Steiner's DTU is used to set operational modes, not to input data like driver's data. It is therefore respectfully submitted that Steiner and Bailey together would not have led an ordinarily skilled person to the invention of claims 5 and 8-10.

Finally, claim 11 provides that "data pertaining to a given parameter of vehicle operation is stored in the predetermined data storage by a frequency-accumulation-type data recording method, in which possible values for the given parameter are divided into ranges, actual values for the given parameter are detected at predetermined time intervals, and every time an actual value that lies within one of the ranges is detected, a count value corresponding to said one of the ranges is incremented." The Office Action rejects claim 11 for obviousness based on Stainer in view of US patent 6,438,472 to Tano et al (which will hereafter simply be called simply "Tano"). The Office Action refers to the passage at Tano's column 14, lines 36-63 for this. This passage describes a flow chart that is shown in Tano's Figure 18, for explaining calculation of standard

deviation (see column 6, lines 15-16). It is respectfully submitted that Tano's calculation of standard deviation would not have led an ordinarily skilled person to modify the arrangement disclosed by Steiner so as to achieve what is recited in claim 11.

For the foregoing reasons, it is respectfully submitted that this application is now in condition for allowance. Reconsideration of the application is therefore respectfully requested.

Respectfully submitted,



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